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| 10/810,690 | 03/29/2004 | Jun Hyung Park | LT-0057 | 1206 |
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| KED & ASSOCIATES, LLP P.O. Box 221200 Chantilly, VA 20153-1200 | | | EXAMINER GELIN, JEAN ALLAND | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/810,690

Applicant(s)

PARK ET AL.

Examiner

Jean A. Gelin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 28 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-26 and 28-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-17, 21-25 and 32-46 is/are allowed.
- 6) ☒ Claim(s) 1-6, 18-20, 26 and 28-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. This is in response to the Applicant's arguments and amendments filed on June 28, 2007 in which claims 1, 8, 26, and 32 have been amended, and claims 7 and 27 have been canceled. Claims 1-6, 8-26, 28-42 are currently pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-7, 18-20, and 26-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Matsuo et al. (US 2003/0203741).

Regarding claim 1, Matsuo teaches a method for controlling data communication in a wireless local area network (LAN) (i.e., controlling data transmission in LANs having different power [0040] inherently, both ad-hoc networks are WLAN), comprising: checking a battery capacity using a first station (i.e., checking the remaining battery capacity, [0075]); determining a transmission characteristic for a wireless LAN communication corresponding to the checked battery capacity (i.e., determining the communication network to communicate based on the remaining battery capacity [0075]-[0078]); and controlling

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communication of data between the first station and a second station or access point based on the determined transmission characteristic, wherein the data is communicated through the LAN in accordance with a first transmission characteristic when the checked battery capacity is within a first capacity range, and is communicated through the LAN in accordance with a second transmission characteristic when the checked battery capacity is within a second capacity range different from the first capacity range (corresponding If the battery power level is low data is transmitted at low power, if the battery power level is high data is transmitted at high power. The wireless terminal selects how to transmit data based on the remaining power capacity in wireless network system environment to reduce power consumption, furthermore when information obtained by communicating with the base station and the ad-hoc network has to be transmitted to the wireless terminals 22 and 25 which are not capable of connecting to multisystem, the communication at lower power is performed [0040]-[0048] and ([0070]-[0076])).

Regarding claim 2, Matsuo teaches wherein said checked battery capacity is of a host personal computer (i.e., terminal 13 could be PC, PDA, or portable phone and performed data communication, [0005] and [0118])).

Regarding claim 3, Matsuo teaches wherein said transmission characteristic includes a data transfer speed or a transmission power save period ([0071])).

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Regarding claim 4, Matsuo teaches wherein said data transfer speed is determined in a multistage manner based on said checked battery capacity ([0072]-[0075]).

Regarding claim 5, Matsuo teaches wherein said transmission save period is determined in a multistage manner based on said checked battery capacity ([0072]-[0075]).

Regarding claim 6, Matsuo teaches wherein the wireless LAN communication comprises an ad hoc mode and an infrastructure mode ([0005] and [0070]).

Regarding claim 18, Matsuo teaches a method, comprising: receiving data communications from a plurality of terminals on a wireless LAN network at an access point (i.e., illustrated in figs. 1-2 are a plurality of wireless terminals transmitting data in communications in ad-hoc networks [0048]-[0054], and [0070]-[0072]); and determining priorities for data transmission and reception with reference to power save period information transmitted from the plurality of stations (i.e., If the battery power level is low data is transmitted at low power (corresponding to terminal having low priority is selected), if the battery power level is high data is transmitted at high power (corresponding to terminal having high priority is selected) [0070]-[0078]).

Regarding claim 19, Matsuo teaches recognizing respective remaining battery powers of said stations from said power save period information transmitted from said stations ([0075]-[0078]); and assigning a highest priority for

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data transmission/reception to any one of said stations having a lowest one of the remaining battery powers ([0075]-[0078]).

Regarding claim 20, Matsuo teaches wherein the wireless LAN network comprises an infrastructure mode ([0070]).

Regarding claim 26, Matsuo teaches an apparatus, comprising: a transmitting wireless LAN terminal coupled to a host computer and configured to determine remaining battery capacity of a host computer (i.e., terminal 13 could be PC, PDA, or portable phone and performed data communication, [0005] and [0118], and [0075]-[0078]), wherein the transmitting station is configured to determine a transmission characteristic for a wireless LAN communication responsive to the remaining battery capacity ([0075]-[0078]); and controlling communication of data between the first station and a second station or access point based on the determined transmission characteristic, wherein the data is communicated through the LAN in accordance with a first transmission characteristic when the checked battery capacity is within a first capacity range, and is communicated through the LAN in accordance with a second transmission characteristic when the checked battery capacity is within a second capacity range different from the first capacity range (corresponding If the battery power level is low data is transmitted at low power, if the battery power level is high data is transmitted at high power. The wireless terminal selects how to transmit data based on the remaining power capacity in wireless network system environment to reduce power consumption, furthermore when information obtained by communicating with the base station and the ad-hoc network has to be

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transmitted to the wireless terminals 22 and 25 which are not capable of connecting to multisystem, the communication at lower power is performed [0040]-[0048] and ([0070]-[0076]).

Regarding claim 28, Matsuo teaches said transmission characteristic includes a data transfer speed or a transmission power save period ([0075]-[0078]).

Regarding claim 29, Matsuo teaches said transfer speed is determined in a multistage manner based on said remaining battery capacity ([0075]-[0078]).

Regarding claim 30, Matsuo teaches said transmission save period is determined in a multistage manner based on said remaining battery capacity ([0075]-[0078]).

Regarding claim 31, Matsuo teaches the wireless LAN communication comprises an ad hoc mode and an infrastructure mode ([0070]).

Allowable Subject Matter

4. Claims 8-17, 21-25, and 32-46 are allowed.

Response to Arguments

5. Applicant's arguments filed 06/28/07 have been fully considered but they are not persuasive.

As per claim 1, the Applicant argues that controlling communication of data between the first station and a second station or access point based on the determined transmission characteristic, wherein the data is communicated through the LAN in accordance with a first transmission characteristic when the

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checked battery capacity is within a first capacity range, and is communicated through the LAN in accordance with a second transmission characteristic when the checked battery capacity is within a second capacity range different from the first capacity range.

However, the Examiner disagrees with the preceding assertion. Matsuo teaches the transmission in wireless local area based on battery capacity of the terminal. If the battery power level is low data is transmitted at low power, if the battery power level is high data is transmitted at high power. The wireless terminal selects how to transmit data based on the remaining power capacity in wireless network system environment, wherein the system can consist of a plurality of Ad-Hocs. Therefore, the rejection is maintained and is made final (see rejection above).

As per claim 18, the Applicant further argues that Matsuo fails to teach determining priorities for data transmission and reception with reference to power save period information transmitted from the plurality of stations. However, the Examiner disagrees the preceding asserting. Matsuo teaches If the battery power level is low data is transmitted at low power (corresponding to terminal having low priority is selected), if the battery power level is high data is transmitted at high power (corresponding to terminal having high priority is selected) [0070]-[0078]). Therefore, the rejection is maintained and is made final (see rejection above).

As per claim 26, the Applicant argues that claim 26 contains features recited in claim 1, and the claim is allowable. Given claim 1 is rejected for reasons recited

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above. Therefore, the Examiner maintains the rejection of claim 26 and its dependent for the same reasons recited above.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean A. Gelin whose telephone number is (571) 272-7842. The examiner can normally be reached on 9:30 AM to 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**JEAN GELIN
PRIMARY EXAMINER**

JGelin
September 14, 2007

